IN THE SUPREME COURT OF TENNESSEE AT NASHVILLE

October 2, 2008 Session Heard at Nashville¹

STATE OF TENNESSEE v. ADRIAN L. SCOTT

Appeal by Permission from the Court of Criminal Appeals
Criminal Court for Davidson County
No. 2006-B-1108 Monte Watkins, Judge

No. M2007-02024-SC-S09-CO - Filed January 23, 2009

This appeal involves the admissibility of expert testimony regarding a sleep parasomnia involving sexual behavior. A defendant charged with committing sexual acts with his stepdaughter asserted that he could not have formed the required criminal intent because he was asleep at the time and was unaware of what he was doing. To support his defense, the defendant notified the State that he intended to present the testimony of a physician who had diagnosed him as having sleep parasomnia involving sexual behavior. The Criminal Court for Davidson County granted the State's motion to exclude the physician's testimony because it was not sufficiently trustworthy and reliable to be presented to the jury. However, the trial court also granted the defendant permission to pursue a Tenn. R. App. P. 9 interlocutory appeal. After the Court of Criminal Appeals declined to hear the appeal, we granted the defendant's Tenn. R. App. P. 11 application to address whether the trial court had properly discharged its gate-keeping responsibilities with regard to the proffered expert evidence. We have determined that the trial court erred by excluding the physician's testimony regarding sleep parasomnia.

Tenn. R. App. P. 11 Appeal by Permission; Judgment of the Criminal Court for Davidson County Reversed and Remanded

WILLIAM C. KOCH, JR., J., delivered the opinion of the court, in which JANICE M. HOLDER, C.J., CORNELIA A. CLARK, and GARY R. WADE, JJ., and E. RILEY ANDERSON, Sp.J., joined.

Jeffery S. Frensley, Nashville, Tennessee, for the appellant, Adrian L. Scott.

Robert E. Cooper, Jr., Attorney General and Reporter; Michael E. Moore, Solicitor General; and Preston Shipp, Assistant Attorney General (on appeal); Victor S. Johnson III, District Attorney General and J.W. Hupp, Assistant District Attorney General (at trial), for the appellee, State of Tennessee.

Oral argument was heard in this case on October 2, 2008, in Nashville, Davidson County, Tennessee, as part of this Court's S.C.A.L.E.S. (Supreme Court Advancing Legal Education for Students) project.

OPINION

I.

On May 15, 2006, a Davidson County grand jury returned a five-count indictment against Adrian Leroy Scott for alleged criminal sexual contact between Mr. Scott and his stepdaughter who at the time was a minor between thirteen and eighteen years of age. Mr. Scott was charged with three counts of sexual battery by an authority figure in violation of Tenn. Code Ann. § 39-13-527 (2006) and two counts of rape in violation of Tenn. Code Ann. § 39-13-503 (2006).

Mr. Scott, through his attorney, advised the State that he intended to call an expert witness in his defense and provided the State with a report from Dr. J. Brevard Haynes, the Medical Director of the Saint Thomas Health Services Center for Sleep. Dr. Haynes concluded that, in his opinion, "sexual behavior in sleep parasomnia is the explanation for [Mr. Scott's] touching of his stepdaughter." The State filed a pre-trial motion in the Criminal Court for Davidson County to exclude this testimony.

Following a hearing on June 27, 2007, the trial court entered an order excluding Dr. Haynes's testimony on two grounds. First, the trial court concluded that "intent is not an element of either offense. Therefore, the information which the defendant seeks to admit through Dr. Haynes as an explanation of the alleged conduct does not aid the jury in an understanding of the offense." Second, the trial court, without elaboration or explanation, found that the "methodology and principles underlying the scientific evidence are not sufficiently trustworthy and reliable to be presented to the trier of fact." Mr. Scott promptly requested the trial court to reconsider its ruling. The trial court denied his motion on August 8, 2007.

Two days later, on August 10, 2007, Mr. Scott filed an application in the trial court for permission to appeal in accordance with Tenn. R. App. P. 9. The trial court granted the motion in an order entered on August 31, 2007. However, on October 10, 2007, the Court of Criminal Appeals denied Mr. Smith's application for an interlocutory appeal. Mr. Smith filed a timely Tenn. R. App. P. 11 application, and on January 28, 2008, we granted Mr. Smith's application for permission to appeal.

Before this Court, Mr. Scott renews his assertion that the trial court erred by excluding Dr. Haynes's testimony. Specifically, he asserts that the trial court erred by finding that the offenses with which he was charged did not have a *mens rea* requirement. He also asserts that the trial court erred by concluding that Dr. Haynes's opinion regarding sleep parasomnia was based on unreliable scientific methodologies and principles.

The State concedes that the offenses with which Mr. Scott was charged "require the showing of a culpable mental state" and, therefore, that "the trial court's apparent belief that the charged offenses do not have a requisite mental element is erroneous." However, the State insists that the trial court's decision to exclude Dr. Haynes's testimony was correct because it would not have

assisted the jury because the testimony was not sufficiently reliable and "a jury would not require an expert to tell them that a person cannot act intentionally while he or she is asleep; it is a matter of common sense." For good measure, the State also asserts that the Court of Criminal Appeals properly denied Mr. Scott's Tenn. R. App. P. 9 application for an interlocutory appeal.²

II.

Mr. Scott contends the criminal court erred by concluding that there is no *mens rea* element of either rape or sexual battery by an authority figure and, accordingly, by excluding Dr. Haynes's testimony on this basis. The State concedes the criminal court erred in reaching this conclusion. The State further concedes that whether Mr. Scott was asleep or awake plainly impacts the sexual battery by an authority figure charges, which require a showing of intentional touching for the purpose of sexual gratification, and the rape charges, which require a showing that Mr. Scott acted with intent, knowledge, or recklessness. The State's concession accurately, though incompletely, defines the mental state required for each of these offenses.³ We agree that the trial court erred by determining that Mr. Scott's mental state was irrelevant and excluding Dr. Haynes's testimony on this basis.

²Whether the Court of Criminal Appeals properly denied Mr. Scott's Tenn. R. App. P. 9 application is not an issue in this case. By granting Mr. Scott's Tenn. R. App. P. 11 application, we determined that this case is appropriate for appellate review. The State has not asserted that we lack jurisdiction over this case.

The offense of sexual battery by an authority figure includes "sexual contact" by an authority figure with a victim who is thirteen years of age or older but less than eighteen years of age in which the defendant uses his or her parental or custodial authority over the victim to accomplish the sexual contact. Tenn. Code Ann. § 39-13-527(a)(1), (3)(B). Tenn. Code Ann. § 39-13-501(6) (2006) defines "sexual contact" as "intentional touching... if that intentional touching can be reasonably construed as being for the purpose of sexual arousal or gratification." While the touching must be intentional, the other elements of the offense may be established by showing that a defendant acted with intent, knowledge, or recklessness because the statute neither provides nor plainly dispenses with a mental state requirement for the offense. Tenn. Code Ann. § 39-11-301 (2006); see also State v. Parker, 887 S.W.2d 825, 827 (Tenn. Crim. App. 1994); 7 Tenn. Practice: Pattern Jury Instructions - Criminal 10.04(a) & 10.04(b) (2008) ("TPI-Criminal").

Mr. Scott was also charged with two forms of rape – Tenn. Code Ann. § 39-13-503(a)(1) (the "unlawful sexual penetration of a victim by the defendant or of the defendant by a victim" where "[f]orce or coercion is used to accomplish the act") and Tenn. Code Ann. § 39-13-503(a)(2) (the "unlawful sexual penetration of a victim by the defendant or of the defendant by a victim" where "[t]he sexual penetration is accomplished without the consent of the victim and the defendant knows or has reason to know at the time of the penetration that the victim did not consent"). Because the statutory definition of neither offense dispenses with a mental state requirement, the State may establish the offense by showing the defendant acted with intent, knowledge, or recklessness. Tenn. Code Ann. § 39-11-301; see also State v. Bowles, 52 S.W.3d 69, 78-79 & nn.9 & 10 (Tenn. 2001); 7 TPI-Criminal 10.02.

Mr. Scott asserts that the trial court erred by excluding Dr. Haynes's testimony on the ground that the methods and principles on which it is based are not sufficiently reliable or trustworthy to be presented to a jury. The State disagrees because Dr. Haynes's opinion is based "almost exclusively" on Mr. Scott's descriptions of his own history. We have determined that the trial court erred by concluding that Dr. Haynes's testimony was not sufficiently reliable or trustworthy to substantially assist the trier of fact.

A.

Trial courts act as gatekeepers when it comes to the admissibility of expert testimony. *State v. Copeland*, 226 S.W.3d 287, 300-01 (Tenn. 2007); *Johnson v. John Hancock Funds*, 217 S.W.3d 414, 425 (Tenn. Ct. App. 2006). Their role "is to ensure that 'an expert, whether basing testimony upon professional studies or personal experience, employs in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field." *Brown v. Crown Equip. Corp.*, 181 S.W.3d 268, 275 (Tenn. 2005) (quoting *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 152 (1999)). A court "must assure itself that the [expert's] opinions are based on relevant scientific methods, processes, and data, and not upon an expert's mere speculation." *McDaniel v. CSX Transp., Inc.*, 955 S.W.2d 257, 265 (Tenn. 1997). The court's reliability analysis has four general inter-related components: (1) qualifications assessment, (2) analytical cohesion, (3) methodological reliability, and (4) foundational reliability.

When assessing the admissibility of expert testimony, the trial court must first determine whether the witness is qualified by knowledge, skill, experience, training, or education to express an opinion within the limits of his or her expertise. *State v. Stevens*, 78 S.W.3d 817, 834 (Tenn. 2002). This determination hinges upon whether the proposed expert's qualifications authorize him or her to give an informed opinion upon the fact or issue for which his or her testimony is being proffered. *State v. Stevens*, 78 S.W.3d at 834. A court is, in essence, asking whether the witness is an expert, either through knowledge, skill, experience, training, or education, in the area in which he or she is providing testimony. Tenn. R. Evid. 702.

However, the court's inquiry into whether expert testimony is sufficiently reliable does not end when a trial court concludes that the witness is, in fact, an expert in the area in which he or she proposes to testify. *Ipse dixit* assertions were insufficient to support the contentions of the Pythagoreans, and they remain so with regard to appeals to the authority of a modern expert as a

⁴The literal translation of the Latin phrase "ipse dixit" is "he himself said it." Black's Law Dictionary 833 (7th ed. 1999). It refers to dogmatic statements – "something said but not proved." Bryan A. Garner, A Dictionary of Modern Legal Usage 468 (2d ed. 1995). The first prominent historical use of the expression ipse dixit is attributed to Cicero's critique of adherents of Pythagoras. William Francis Henry King, Classical and Foreign Quotations: A Polyglot Manual of Historical and Literary Sayings, Noted Passages in Poetry and Prose, Phrases, Proverbs, and Bon Mots 145 (3d. 1904); see generally Marcus Tullius Cicero, De Natura Deorum (On the Nature of the Gods) Book I, § 5 (Francis Brooks (continued...)

sole basis for admission. Just because an expert is speaking does not make what he or she is saying sufficiently reliable to be admitted into evidence as expert testimony. *Brown v. Crown Equip. Corp.*, 181 S.W.3d at 274. The courts "must analyze the science and not merely the qualifications [of the expert]." *McDaniel v. CSX Transp., Inc.*, 955 S.W.2d at 265.

Analyzing the science requires the trial court to consider whether the "basis for the witness's opinion, *i.e.*, testing, research, studies, or experience-based observations, adequately supports that expert's conclusions" to ensure that there is not a significant analytical gap between the expert's opinion and the data upon which the opinion is based. *State v. Stevens*, 78 S.W.3d at 834-35. As part of this analysis, the courts should consider how and why the expert was able to extrapolate from certain data to the conclusions that he or she has reached. *Gen. Elec. Co. v. Joiner*, 522 U.S. 136, 144-46 (1997).⁵ When assessing the connection between an expert's conclusions and the underlying data upon which those conclusions are based, expert testimony may warrant exclusion where "there is simply too great an analytical gap between the data and the opinion proffered." *State v. Stevens*, 78 S.W.3d at 834 (quoting *Gen. Elec. Co. v. Joiner*, 522 U.S. at 146).

Additionally, the courts should consider the methodological and foundational reliability of the expert's testimony. The methodological inquiry focuses upon the reliability of the methodology employed by the expert.⁶ The foundational inquiry has two steps. The first step is to assess the expert's field or discipline itself by focusing on the reliability of the studies, articles, and data that compose the field and that provide the underlying foundation for the expert's testimony.⁷ The second step is to analyze the reliability of the underlying facts or data upon which the expert's opinion is predicated. *See* Tenn. R. Evid. 703.⁸

There are certain methods and foundations that, as a matter of law, are established for purposes of admissibility as being reliable or unreliable either by statute or by having already been

^{4(...}continued)

trans., Meuthen 1896) (45 B.C.) ("Nor am I in the habit of commending the custom of which we hear in connection with the Pythagoreans, of whom it is said that when they affirmed anything in argument, and were asked why it was so, their usual reply was 'the master said it,' 'the master' being Pythagoras, and the force of preconceived opinion being so great as to make authority prevail even without the support of reason.").

⁵Harvey Brown, Eight Gates for Expert Witnesses, 36 Hous. L. Rev. 743, 806-07 (1999) ("Brown").

⁶See Brown v. Crown Equip. Corp., 181 S.W.3d at 274, 277, 279-81; Freeman v. Blue Ridge Paper Prods., Inc., 229 S.W.3d 694, 708-10 (Tenn. Ct. App. 2007); Brown, 36 Hous. L. Rev. at 820-21; Margaret A. Berger, Evidentiary Framework, Reference Manual on Scientific Evidence 71 (1994).

⁷See State v. Copeland, 226 S.W.3d at 298-300 (discussing the development of the field of research into eyewitness identification); Brown, 36 Hous. L. Rev. at 821.

⁸ Merrell Dow Pharm., Inc. v. Havner, 953 S.W.2d 706, 714 (Tex.1997); Brown, 36 Hous. L. Rev. at 812, 821, 823.

assessed for their reliability in a prior controlling judicial decision. There are also "ordinary cases" where methodological and foundational reliability may be simply assumed in the absence of some sufficiently weighty showing by the objecting party that warrants a more in-depth inquiry. However, other cases will require trial courts to make a more probing inquiry.

To assess methodological and foundational reliability, this Court, in *McDaniel v. CSX Transportation., Inc.*, identified the following non-exhaustive list of factors for trial courts to consider: (1) whether scientific evidence has been tested and the methodology with which it has been tested; (2) whether the evidence has been subjected to peer review or publication; (3) whether a potential rate of error is known; (4) whether the evidence is generally accepted in the scientific community; and (5) whether the expert's research in the field has been conducted independent of litigation. *McDaniel v. CSX Transp., Inc.*, 955 S.W.2d at 265. Rigid application of these factors is unnecessary. *State v. Copeland*, 226 S.W.3d at 302. Not all expert testimony will "fit" with these factors, thus the exact considerations that may be appropriate will vary depending upon "the nature of the issue, the witness's particular expertise, and the subject of the expert's testimony." *Brown v. Crown Equip. Corp.*, 181 S.W.3d at 277.

While a trial court's role as a gatekeeper is critical, it is not unconstrained. When making an admissibility determination, trial courts are not empowered to choose between legitimate competing expert theories by excluding the lesser of the two. To the contrary, that task must be left to the trier of fact. *State v. Farner*, 66 S.W.3d 188, 207-08 (Tenn. 2001); *McDaniel v. CSX Transp., Inc.*, 955 S.W.2d at 265. The party proffering expert testimony need not establish that the expert testimony is correct, only that the expert testimony "rests upon 'good grounds." *Ruiz-Troche v. Pepsi Cola of P.R. Bottling Co.*, 161 F.3d 77, 85 (1st Cir. 1998) (quoting *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579, 590 (1993)); *see also In re Paoli R.R. Yard PCB Litig.*, 35 F.3d 717, 744 (3d Cir. 1994); *Burley v. Kytec Innovative Sports Equip., Inc.*, 737 N.W.2d 397, 406 (S.D. 2007). Where such a foundation exists, even if the trial court is of the view that there are better grounds for an alternative conclusion, ¹² the proffered expert testimony "should be tested by the adversary process – competing expert testimony and active cross-examination – rather than excluded from jurors'

⁹See, e.g., State v. Scott, 33 S.W.3d 746, 757-59 (Tenn. 2000); Spencer v. Commonwealth, 393 S.E.2d 609, 621 (Va. 1990); Richard Collin Mangrum, Interpreting Nebraska Rule of Evidence 702 After the Nebraska Supreme Court Adopted the Federal Daubert Standard for the Admissibility of Expert Testimony in Schafersman v. Agland Coop, 35 Creighton L. Rev. 31, 99-100 (2001).

¹⁰See Kumho Tire Co., Ltd. v. Carmichael, 526 U.S. at 152; United States v. Evans, 272 F.3d 1069, 1094 (8th Cir. 2001); Bado-Santana v. Ford Motor Co., 364 F. Supp.2d 79, 105 (D.P.R. 2005); Chapman v. State, 18 P.3d 1164, 1174 (Wyo. 2001).

¹¹Like science itself, well-established methodologies and principles remain subject to challenge based upon further testing. See generally Karl Popper, The Logic of Scientific Discovery (14th prtg. 2002). However, in the absence of some solid basis for reconsideration, trial courts need not undertake a more probing analysis when the reliability of a methodology or field has been previously ruled upon in a controlling opinion.

¹²In re Paoli R.R. Yard PCB Litigation, 35 F.3d at 744; Hayes v. Decker, 822 A.2d 228, 233 (Conn. 2003).

scrutiny for fear that they will not grasp its complexities or satisfactorily weigh its inadequacies." *Ruiz-Troche v. Pepsi Cola of P.R. Bottling Co.*, 161 F.3d at 85.

In considering whether good grounds underlie the expert testimony, the trial court is assessing whether the "proposed expert testimony meets the levels of relevance and reliability established in Tenn. R. Evid. 702 & 703." *Pullum v. Robinette*, 174 S.W.3d 124, 134 (Tenn. Ct. App. 2004). An expert witness may testify if his or her "scientific, technical, or other specialized knowledge will substantially assist the trier of fact to understand the evidence or to determine a fact in issue." Tenn. R. Evid. 702. A witness may qualify as an expert based upon his or her knowledge, skill, experience, training, or education. Tenn. R. Evid. 702. In considering whether to admit expert testimony, trial courts should disallow expert testimony "if the underlying facts or data indicate lack of trustworthiness." Tenn. R. Evid. 703.

Reviewing courts will not reverse a decision regarding the admission or exclusion of expert testimony unless the trial court has abused its discretion. *State v. Reid*, 91 S.W.3d 247, 294 (Tenn. 2002) (appendix); *State v. Stevens*, 78 S.W.3d at 832. The abuse of discretion standard applies regardless of whether the ruling was made during pre-trial proceedings or during the trial itself. *Johnson v. John Hancock Funds*, 217 S.W.3d at 425-26. A trial court abuses its discretion when it applies incorrect legal standards, reaches an illogical conclusion, bases its decision on a clearly erroneous assessment of the evidence, or employs reasoning that causes an injustice to the complaining party. *Konvalinka v. Chattanooga-Hamilton County Hosp. Auth.*, 249 S.W.3d 346, 358 (Tenn. 2008).

В.

Dr. Haynes was examined and cross-examined in detail regarding his professional qualifications, his methodology, and the factual and scientific basis for his opinions. For its part, the State presented meager evidence to support its motion to exclude Dr. Haynes's testimony.¹³ The trial court offered no explanation for its conclusory observation that the "methodology and principles underlying the scientific evidence are not sufficiently trustworthy and reliable to be presented to the trier of fact." We have determined that an appropriate inquiry demonstrates that the trial court erred by excluding Dr. Haynes's testimony.

Dr. Haynes's Professional Qualifications

We have little difficulty in concluding that Dr. Haynes is qualified to give an expert opinion regarding sleep disorders. He is a licensed physician who graduated from Vanderbilt University School of Medicine in 1972. He holds board certifications in internal, pulmonary, and sleep medicine and has been board certified in sleep medicine since 1984. In terms of his medical

¹³The State presented no expert testimony to contradict Dr. Haynes. Instead, it called Nashville Fire Department District Chief Manuel Fonseca who supervised Mr. Scott for nine months. Chief Fonseca testified that firefighters regularly sleep at the fire station and that he had never observed Mr. Scott do anything unusual in his sleep.

practice, Dr. Haynes's focus for more than two decades has been on sleep medicine. He established the first sleep center in Middle Tennessee in 1984. He was the medical director of the Sleep Disorders Center of Saint Thomas Hospital from 1984 through April 2006, and since May 2006, he has been the Medical Director of the Saint Thomas Health Services Center for Sleep. He is a fellow of the Clinical Sleep Society and a member of the American Sleep Disorders Association. For the latter association, Dr. Haynes has served as an accreditation site visitor and southern region accreditation chairperson. Dr. Haynes is also an assistant clinical professor of medicine at the Vanderbilt University School of Medicine.

THE BASIS FOR DR. HAYNES'S OPINION

We have also determined that this record does not demonstrate such a wide gap between Dr. Haynes's conclusions and the data on which he bases these conclusions that his testimony should be excluded. With regard to the basis for his opinion that "sexual behavior in sleep parasomnia is the explanation for [Mr. Scott's] touching of his stepdaughter," Dr. Haynes stated:

I have interviewed Adrian Scott and performed a physical examination. Polysomnography followed by multiple sleep latency testing was performed at Saint Thomas Health Services Center for Sleep on 08/06/2006. I have listened to the interview conducted by Detectives Robinson and Coley on 10/26/2005. I have reviewed the medical literature on the subject of sexual behavior in sleep parasomnia.

In brief, Mr. Scott has a history of night terrors and sleep walking. His wife reports that he fondled her vagina while he was asleep on a number of occasions. He had no recall of this behavior. His stepdaughter reported that he fondled her groin while the family was sleeping in close quarters. On three or four other occasions she reported similar behavior when he had fallen asleep in her room. . . He would fall asleep while seated in a chair by the bed as they were watching television. She reported that he fondled her under these circumstances. Likewise, he has no recall of this behavior. There is no history or accusation of vaginal fondling during wakefulness.

... I base this opinion upon the following:

- (1) His history of night terrors and sleep walking.
- (2) He has exhibited similar behavior with his wife.
- (3) His behavior is in keeping with that reported in other individuals with this parasomnia.
- (4) There is no history of vaginal foundling during wakefulness.
- (5) This behavior is not in keeping with his character.

In formulating his initial opinion, Dr. Haynes relied upon the following sources: American Academy of Sleep Medicine, *The International Classifications of Sleep Disorders: Diagnostic & Coding Manual* (2d ed. 2005); Michael Mangan, *Sleep Sex: Uncovered* (2001); Rosanna Alves et al., *Sexual Behavior in Sleep, Sleep Walking and Possible REM Behavior Disorder: A Case Report*, 2 Sleep Research 71 (1999); Thomas D. Hurwitz et al., *Sleep Related Sexual Abuse of Children*, 18 Sleep Research 246 (1989); Colin M. Shapiro et al., *Sex Somnia - A New Parasomnia?*, 48 Can. J. Psychiatry 311 (2003); and Colin M. Shapiro et al., *Sexual Behavior in Sleep: A Newly Described Parasomnia*, 25 Sleep Research 367 (1996).

Between the time Dr. Haynes completed his written report and his testimony in this case, Dr. Haynes reviewed additional newly published literature that he believed supported his initial determination. He specifically cited Carlos H. Schenck et al., *Sleep and Sex: What Can Go Wrong? A Review of the Literature on Sleep Related Disorders and Abnormal Sexual Behaviors and Experiences*, 30 Sleep 683 (2007), and introduced a copy of this article into evidence. Dr. Haynes also testified that he has listened "extensively" to two of the country's leading experts' presentations on the issue of sexual behavior as a form of sleep parasomnia.

The literature provided by Dr. Haynes suggests certain commonalities among persons with sleep parasomnias that involve sexual activity. Dr. Haynes noted that Mr. Scott's behavior mirrored that of others diagnosed with a sleep parasomnia involving sexual behavior. He also relied on additional supporting information to bolster his conclusion. Having reviewed the literature, we cannot conclude that the analytical gap between Dr. Haynes's conclusion and the underlying data is sufficiently wide to warrant exclusion of Dr. Haynes's testimony.

Dr. Haynes's Methodology

Nor does the methodology employed by Dr. Haynes provide grounds for exclusion of his testimony. Dr. Haynes stated that his diagnosis of Mr. Scott was reached on the same basis that a patient would normally be diagnosed within his field. While the State objects to Dr. Haynes's method of relying upon a patient's self-reporting, Dr. Haynes's methodology is consistent with the accepted practices utilized by physicians and psychologists in treating and diagnosing patients. We find nothing in his methodology that suggests Dr. Haynes's testimony should be barred from being considered by a jury.

¹⁴There is a strong male predominance among patients. The sexual activities engaged in by males involved fondling and sexual intercourse which differed markedly from the sexual behavior of females. The sexual activity of males tended towards assaultive behavior including sexual acts involving minors. These sleep sex experiences were not one-time occurrences but rather occurred on multiple occasions. Generally, sleep sex was not the only sleep parasomnia behavior exhibited by the patient. For example, the individual might also engage in sleepwalking. Full amnesia regarding the incidents was also common.

THE RELIABILITY OF DR. HAYNES'S TESTIMONY

The sole remaining inquiry is an assessment of the foundational reliability of Dr. Haynes's testimony. As previously discussed, there are at least two aspects of foundational reliability – (1) reliability of the field itself and (2) the trustworthiness of the facts or data utilized by the expert. There are some disciplines where an individual may employ the proper methodological approach of their field and be an expert thereof, but the field is simply so unreliable as to warrant excluding the expert. *Kumho Tire Co., Ltd. v. Carmichael*, 526 U.S. at 151 ("Nor... does the presence of... general acceptance... help show that an expert's testimony is reliable where the discipline itself lacks reliability, as, for example, do theories grounded in any so-called generally accepted principles of astrology or necromancy.")¹⁵ As for the underlying facts or data relied upon by the expert, Tenn. R. Evid. 703 expressly provides that courts should disallow "testimony in the form of an opinion or inference if the underlying facts or data indicate lack of trustworthiness." ¹⁶

The State has not objected to the reliability of the field of sleep science or even to the reliability of the underlying studies related to sleep sex behavior as a form of sleep parasomnia. In fact, the State has conceded for purposes of admissibility the reliability thereof.¹⁷ Nor is the State's concession unwarranted. Dr. Haynes noted that the published literature he relied upon is peer-reviewed having been assessed by experts in the field and that studies, findings, or conclusions that are not sufficiently supported are rejected for publication. In fact, Dr. Haynes provided the trial court with a 2007 article that provides an analysis of the literature related to sexual behavior as a sleep parasomnia.

Furthermore, from Dr. Haynes's testimony, review of the 2007 article, and the second edition of *The International Classifications of Sleep Disorders: Diagnostic & Coding Manual*, it appears that a diagnosis of sexual behavior as sleep parasomnia has been generally accepted within the field of sleep science. While Dr. Haynes's diagnosis was not reached independent of litigation, the underlying research relied upon by Dr. Haynes has been conducted independent of litigation. The

¹⁵See David L. Faigman, The Law's Scientific Revolution: Reflections and Ruminations on the Law's Use of Experts in Year Seven of the Revolution, 57 Wash. & Lee L. Rev. 661, 667 (2000):

An expert's use of the same intellectual rigor in the courtroom as in the field does not ensure reliable testimony if the field itself is not rigorous. The same intellectual rigor test is a necessary, but not a sufficient, criterion for admission.... Simply put, many fields of expertise lack intellectual rigor, and courts must recognize when this is so. The whole point... was to require courts to assess the fields themselves and not defer to the guilds that bring their so-called expertise to the courtroom.

Merrell Dow Pharms., Inc. v. Havner, 953 S.W.2d at 714 ("If the foundational data underlying opinion testimony are unreliable, an expert will not be permitted to base an opinion on that data because any opinion drawn from that data is likewise unreliable.").

¹⁷At oral argument, counsel stated that the State "has no issue with someone saying sex parasomnia is a legitimate diagnosis . . . so . . . I will concede that." Additionally, counsel added that "based on this record, I do not have a leg to stand on to say that sex parasomnia is not real."

underlying research relied upon by Dr. Haynes is built on a medical and psychological foundation, and its methodologies are consistent with this foundation. Expert sleep disorder testimony is not entirely novel;¹⁸ such testimony has been found by other courts to warrant admission as expert testimony. *See*, *e.g.*, *State v. Cabrera*, 891 A.2d 1066, 1074-75 (Del. Super. 2005); *McClain v. State*, 678 N.E.2d 104, 107 (Ind. 1997). Thus, the State's concession does not appear to be unwarranted.

Instead of taking aim at the field of sleep science, the State attacks the reliability of the underlying facts upon which Dr. Haynes based his opinion. In essence, the State argues that Dr. Haynes's testimony should be excluded because it relies on Mr. Scott's self-serving and inherently unreliable reports of his own conduct. Dr. Haynes's analysis went beyond Mr. Scott's self-reporting, but his conclusion clearly depended on Mr. Scott's self-reporting. Dr. Haynes "took a history, performed [a] physical examination, performed a sleep study, followed by multiple sleep tests" In reaching his diagnosis, Dr. Haynes also listened to an audiotape of the detectives' interview of Mr. Scott and reviewed a statement from Mr. Scott's stepdaughter. As part of a multiple sleep latency test, Dr. Haynes discovered what he characterized as an objectively measurable sleep abnormality in terms of Mr. Scott's level of sleepiness following having slept well. However, the State is certainly correct that Dr. Haynes plainly indicated that the indispensable core of his diagnosis arose from information conveyed to him by Mr. Scott.

When determining the adequacy of the factual foundation for the expert's conclusion, the court assesses (1) whether the facts are "reasonably relied upon by experts in the particular field" and (2) whether the facts are trustworthy. Tenn. R. Evid. 703 advisory comm'n cmt. "Medical professionals reasonably may be expected to rely on self-reported patient histories. Such histories provide information upon which physicians may, and at times must, rely in their diagnostic work." Walker v. Soo Line R.R. Co., 208 F.3d 581, 586 (7th Cir. 2000) (citation omitted). Simply stated, "many diagnoses either cannot be validated by objective testing or are so difficult to validate that routine clinical practice relies solely on self report. For example, if a person claims to have post traumatic stress disorder, objective validation of the assertion is difficult, if not impossible." While reliance upon self-reporting is certainly common and often sufficient to be deemed reliable, this is not invariably so. Accordingly, "[i]f a patient self reports that his leg is broken, the doctor may give little weight to that statement. But the doctor will give great weight to an X-ray of the leg that shows the leg is broken." Where the expert's testimony is otherwise reliable and experts in the field would reasonably rely upon such evidence, concerns are more properly addressed through vigorous

¹⁸ Expert sleep disorder testimony has been presented without objection in numerous courts. See, e.g., United States v. McDuffie, 65 M.J. 631, 636 (A.F. Ct. Crim. App. 2007); Smith v. State, 663 S.E.2d 155, 156-67 (Ga. 2008); State v. Overton, 815 A.2d 517, 520 (N.J. Super. App. Div. 2003). Common usage alone would not be an adequate basis to find expert testimony meets reliability standards, but it demonstrates the widespread and non-novel nature of the field or methodology.

Ansar M. Haroun & Grant H. Morris, Weaving A Tangled Web: The Deceptions of Psychiatrists, 10 J. Contemp. Legal Issues 227, 237 (1999) ("Haroun & Morris").

²⁰Haroun & Morris, 10 J. Contemp. Legal Issues at 237.

cross-examination rather than by exclusion of the testimony. *Walker v. Soo Line R.R. Co.*, 208 F.3d at 586-87; *State v. Alberico*, 861 P.2d 192, 210 (N.M. 1993) ("Any prejudice that might result from self-reporting... can be cured by cross-examination addressing the point that the diagnosis is based upon what the complainant says, not upon an independent evaluation of her truthfulness.").

As for the appropriateness of reliance on self-reporting in this case, Dr. Haynes conducted a more objective inquiry using a polysomnogram (a sleep study), during which Mr. Scott did not exhibit any aberrant sexual behaviors in his sleep. However, Dr. Haynes indicated that such testing is generally directed towards considering other "co-existent sleep disorders" and that patients while under testing conditions – electrodes attached, being monitored, and not actually having anyone sleeping near the subject – seldom exhibit aberrant sexual behavior. Dr. Haynes's assertion is consistent with the findings published in the 2007 article *Sleep and Sex: What Can Go Wrong? A Review of the Literature on Sleep Related Disorders and Abnormal Sexual Behaviors and Experiences* which indicated that less than 16% of patients in published case studies exhibited such behavior during polysomnogram monitoring. Because patients seldom exhibit such behavior under polysomnogram conditions, Dr. Haynes indicated that reliance upon self-reporting was critical to diagnosis and evaluation. The literature in the field bolsters Dr. Haynes's contention that such facts would be relied upon by other experts in the field. We conclude that self-reported facts would be relied upon by sleep science experts in reaching a diagnosis.

Thus, we turn to the trustworthiness of the facts relied upon by Dr. Haynes in reaching his conclusion. Consideration of the trustworthiness of the underlying facts necessarily extends beyond the question of whether experts in the field rely upon such facts. *See* Tenn. R. Evid. 703 advisory comm'n cmt. The State squarely takes aim at the trustworthiness of Mr. Scott's self-reporting. Essentially, the State contends that because the facts relied upon by Dr. Haynes were self-reported by and in the self-interest of a criminal defendant they are inherently lacking in trustworthiness.

A foundation built upon facts contrary to known undisputed facts, facts that do not adequately support the conclusion, or assumptions that neither reasonably arise from an expert's expertise or inferences that can reasonably be drawn from the evidence are examples of failings that would render the facts relied upon by an expert insufficiently trustworthy.²¹ However, reliance upon self-reported facts in the context of a medical or psychological evaluation, while certainly fodder for cross-examination, is not an adequate basis for excluding an expert's opinion for lack of an adequately trustworthy foundation. *See State v. Howard*, No. E2007-00178-CCA-R3-PC, 2008 WL

²¹See, e.g., Bogosian v. Mercedes-Benz of N. Am., Inc., 104 F.3d 472, 479 (1st Cir. 1997); Scott v. Blue Springs Ford Sales, Inc., 215 S.W.3d 145, 176 (Mo. Ct. App. 2006); Brown, 36 Hous. L. Rev. at 870-74; cf. Brooke Group Ltd. v. Brown & Williamson Tobacco Corp., 509 U.S. 209, 242 (1993); Burroughs Wellcome Co. v. Crye, 907 S.W.2d 497, 499 (Tex. 1995) ("When an expert's opinion is based on assumed facts that vary materially from the actual, undisputed facts, the opinion is without probative value and cannot support a verdict or judgment.").

1805758, at *12-13 & n.9 (Tenn. Crim. App. Apr. 22, 2008), perm. app. denied (Tenn. Oct. 27, 2008).²²

We decline to accept the State's implicit invitation to craft a rule that would effectively result in a per se bar on any medical or psychological expert testimony derived from self-reported statements of interested parties following the inception of litigation or the issuance of an indictment when such statements would reasonably be relied upon by experts within the field. The deleterious impact of such a rule on the system of civil and criminal justice in Tennessee would be severe. While Tenn. R. Evid. 703's requirement that the testimony be excluded if "the underlying facts or data indicate lack of trustworthiness" invites courts to review the facts and data relied upon by an expert to assess their trustworthiness, it is not a back-door route to usurpation of the role of the jury as the finder of fact or a medium for assessing the credibility of the witness and weight to be afforded to expert testimony. *McDaniel v. CSX Transp., Inc.*, 955 S.W.2d at 265.

Each rule of evidence, "by balancing probative value, by excluding unreliable evidence, by barring extraneous matter, and by guiding the judge and jury in the proper performance of their decision-making function, is intended to play a role in guaranteeing a fair trial." *State v. Rodriguez*, 254 S.W.3d 361, 372-73 (Tenn. 2008) (quoting Addison K. Goff, IV, *Mixed Signals: A Look at Louisiana's Experience with Harmless Error in Criminal Cases*, 59 La. L. Rev. 1169, 1177 (1999)). Consistent with Tenn. R. Evid. 702 and 703, Dr. Haynes's testimony is sufficiently reliable and its probative value of sufficient weight to render it admissible. The interests of a fair trial will be better served by what will undoubtably be a vigorous cross-examination by the State of Dr. Haynes than by preventing Mr. Scott from being able to call Dr. Haynes as a witness in his defense.

IV.

As an alternative ground for affirming the trial court's exclusion of Dr. Haynes's testimony, the State asserts that Dr. Haynes's testimony will not substantially assist the trier of fact because it is common sense that persons cannot act intentionally while they are asleep. The trial court did not specifically base its decision on this argument. We find this argument unpersuasive.

Tenn. R. Evid. 702 provides that "[i]f scientific, technical, or other specialized knowledge will substantially assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise." This rule sets a higher admissibility standard than its federal counterpart. Accordingly, Tennessee's courts require expert testimony to have greater probative force than may be required in the federal courts. *Howell v. State*, 185 S.W.3d 319, 337 (Tenn. 2006); *McDaniel v. CSX Transp., Inc.*, 955 S.W.2d at 264. Where expert testimony is merely an iteration of what would be within the jurors' common sense, the admission of such evidence does not assist, much less substantially assist, the trier of fact to understand the evidence or determine a fact at issue.

²²See also, e.g., Cooper v. Carl A. Nelson & Co., 211 F.3d 1008, 1021 (7th Cir. 2000); Brafford v. Brafford's Constr. Co., 482 S.E.2d 34, 37 (N.C. Ct. App. 1997); Reichert v. Phipps, 84 P.3d 353, 364 (Wyo. 2004).

State v. Murphy, 953 S.W.2d 200, 203 (Tenn. 1997); State v. Bolin, 922 S.W.2d 870, 874 (Tenn. 1996); see also United States v. Zajanckauskas, 441 F.3d 32, 39 (1st Cir. 2006); Athay v. Stacey, 128 P.3d 897, 904 (Idaho 2005). Accordingly, a court would not err by excluding an expert whose testimony consisted solely of providing a dressed-up and credentialed declaration of what would be already safely within a juror's common-sense understanding.

Even assuming for purposes of argument a juror's common sense would inform him or her that a sleeping person does not act intentionally with regard to his or her somatic actions, the State's argument remains unconvincing. Dr. Haynes's testimony is not as narrowly circumscribed as the State suggests. To the contrary, Dr. Haynes's testimony would provide a description of a sleep disorder that could lead to sexual behavior being exhibited as part of a sleep parasomnia. A description and explanation of a form of sleep parasomnia, where such behavior occurs, certainly extends beyond jurors' common sense understanding. Furthermore, Dr. Haynes reached a conclusion that the "sexual behavior in sleep parasomnia is the explanation for [Mr. Scott's] touching of his stepdaughter." Dr. Haynes's medical diagnosis of Mr. Scott as someone with this form of sleep parasomnia extends considerably further than the State's narrow description of Dr. Haynes's testimony and well beyond the jurors' common sense understanding. The exclusion of Dr. Haynes as a witness cannot be upheld on the basis of his testimony merely constituting common sense.

V.

We reverse the Davidson County Criminal Court's order excluding Dr. Haynes from testifying as an expert witness. We also remand the case to the criminal court for further proceedings consistent with this opinion and tax the costs of this appeal to the State of Tennessee.

WILLIAM C. KOCH, JR., JUSTICE